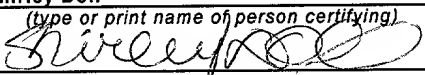


# APPLICATION FOR LETTERS PATENT OF THE UNITED STATES

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## SPECIFICATION

To all whom it may concern:

Be It Known, That we, **Robin Mackay** and **Richard Cudd**, of London, United Kingdom and London, United Kingdom, respectively, have invented certain new and useful improvements in **ONLINE AUCTION SYSTEMS**, of which we declare the following to be a full, clear and exact description:

## ONLINE AUCTION SYSTEMS

### Background of the Invention

This invention relates to online auction systems.

5 Online auctions are a growth area within e-commerce, employed by numerous users to buy and/or sell a plethora of items or lots each day. These items are usually tangible goods but may represent intangible services. Well-known current examples of online auction systems operate under the trade marks e-Bay and QXL. e-Bay, for instance, has grown since its launch in 1995 to serve over 4 million new auctions and 450,000 new items every day, in  
10 over 4000 item categories.

In known online auction systems such as e-Bay, buyers visit a website to view items advertised for sale on the website by sellers. If a buyer wishes to buy an item, he or she enters an auction and becomes a bidder for that item by indicating a maximum bid. The system negotiates an outcome automatically by bidding incrementally on the bidder's behalf  
15 up to the maximum bid, having regard to factors such as a comparison with bids of different bidders and the seller's minimum reserve price. Once a sale has been agreed between a successful bidder and the seller, the system leaves the bidder and the seller to complete the transaction by exchanging an agreed sum of money for the item bought.

A disadvantage with known online auction systems is that it is necessary for a user,  
20 be it bidder or seller, to check back to the website repeatedly to see how the auction is proceeding and how it affects that user. Some known systems try to avoid this problem by sending an e-mail message to a user affected by a change in the auction, such as an incoming increased bid, but e-mail messages are slow to transmit and inconvenient for the user to access.

25 Consequently, it is not possible in known online auction systems for the user to learn of changes in the auction such as bids or sales as soon as they happen. This means that the user is deprived of real-time information that could be crucial to the outcome of the auction and that would, at least, add to the interest and enjoyment of the auction process. It also follows that the auction process can be painfully slow to complete. Similarly, whilst the

automatic processing of known online auction systems can be convenient for users who wish to minimize their participation and involvement, this precludes more active real-time user participation in the sense of a live auction.

In response to these drawbacks, the Inventors have devised a distributed online auction system that accurately matches buyers and sellers using a peer to peer architecture enabling not only automated but also 'live' Internet auctions.

The invention resides in a method of conducting an online auction on a communications network, the method comprising: a first user terminal generating an offer to sell or to buy an item in accordance with first offer criteria; a second user terminal generating an offer to buy or to sell a corresponding item in accordance with second offer criteria; comparing the offer criteria to match an offer to sell and an offer to buy if any or all of their criteria match; in response to a match between the offers, opening a peer to peer communication channel between the user terminals that made the matching offers; and conducting an auction between those user terminals via the communication channel.

The invention also resides in an online auction system for conducting an online auction on a communications network, the system comprising: a first user terminal adapted to generate an offer to sell or to buy an item in accordance with first offer criteria; a second user terminal adapted to generate an offer to buy or to sell a corresponding item in accordance with second offer criteria; matching means for comparing the offer criteria to match an offer to sell and an offer to buy if any or all of their criteria match; and communication means responsive to the matching means to open a peer to peer communication channel for conducting an auction between user terminals that made matching offers.

### **Summary of the Invention**

In preferred embodiments, the invention contemplates software that is resident on a user's PC or other computing device such as an Internet-enabled mobile telephone. The software enables the user to identify other users selling or buying (as appropriate) an item of interest, to participate in auctions as bidder or seller, and to connect directly via the Internet to the seller or buyer of goods without needing to access a third party website.